

# IES-2042PA

➤ **Industrial 6-port slim type lite-managed Ethernet switch with 4x10/100Base-T(X) and 2x100Base-FX, SFP socket**

## Features

- Fastest Redundant Ethernet Ring : **O-Ring** (recovery time < 10ms over 250 units of connection)
- **Open-Ring** support the other vendor's ring technology in open architecture
- Supports 4 ports 10/100Base-T(X) and 2 ports 100Base-FX SFP Port
- SNMP v1/v2c/v3 ,http server, telnet server support
- Web-based interface, telnet server and Windows utility (**Open-Vision**) configuration
- Event notification through Syslog, Email, SNMP trap, and relay
- Provides Web / Windows Utility / DIP-Switch function to set Ring
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled
- Supports LLDP Protocol

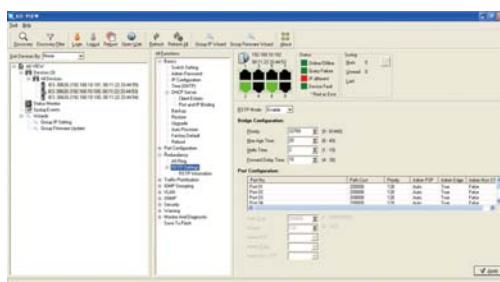
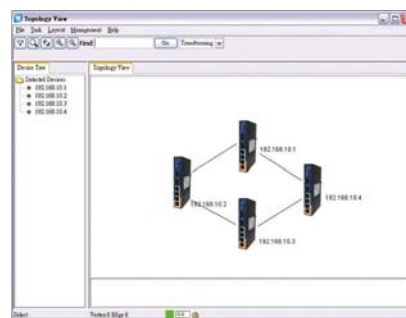
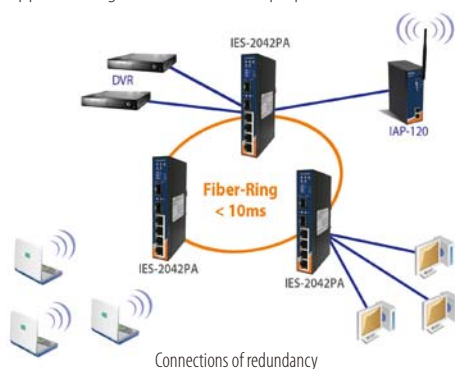


## Introduction

IES-2042PA is a Lite-Managed Redundant Ring Ethernet switch. With very compact size of housing, you can install IES-2042PA easily. In addition, it also supports of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection) and Open-Ring can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. IES-2042PA provides the setting ability of Web-GUI and Windows Utility, also support the simple DIP-Switch setting function which offers great flexibility to set up the Ring. With it's rigid IP-30 housing design, it can operate under harsh environment. The feature of wide operating temperature range from -40 to 70°C can satisfy most requirement of operation.

## Open-Vision

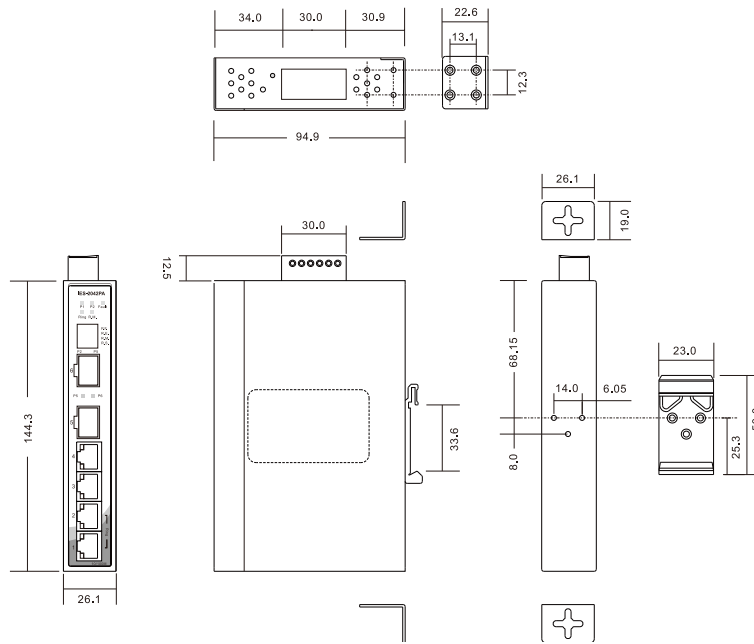
IES-2042PA can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, O-Ring redundant technology is supported to guarantee a non-stop operation.



Monitoring and Configuration interface

Designed for Rugged Excellence

Dimensions



(Unit=mm)

Specifications

| ORing Switch Model                          | IES-2042PA  |
|---|---|
| <b>Physical Ports</b>                       |   |
| 10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX | 4   |
| 100Base-FX SFP Ports                        | 2   |
| <b>Technology</b>                           |   |
| Ethernet Standards                          | IEEE 802.3 for 10Base-T<br>IEEE 802.3u for 100Base-TX and 100Base-FX<br>IEEE 802.3x for Flow control<br>IEEE 802.1D for STP (Spanning Tree Protocol)<br>IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)<br>IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)                    |
| MAC Table                                   | 2048 MAC addresses  |
| Priority Queues                             | 4   |
| Processing                                  | Store-and-Forward   |
| Switch Properties                           | Switching bandwidth : 1.2Gbps<br>VLAN : Port Based  |
| Security Features                           | Enable/disable ports<br>VLAN to segregate and secure network traffic  |
| Software Features                           | STP/RSTP (IEEE 802.1D/w)<br>Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units<br>DHCP Client<br>Port base VLAN<br>LLDP (Link Layer Discovery Protocol)<br>Port configuration, status, statistics, monitoring, security<br>SNMP v1/v2c/v3 and private MIB support |
| Network Redundancy                          | O-Ring    Open-Ring    Fast recovery<br>STP        RSTP   |
| <b>DIP-Switch Setting</b>                   |   |
| P.F.  | When power fault enable relay warning system (On : Enable, Off : Disable function)  |
| R.E.  | Enable/Disable O-Ring function (On : Enable, Off : Disable)   |
| R.M.  | Enable/Disable Ring Master Mode (On : Enable, Off : Disable)  |
| R.S.  | O-Ring redundant port select ( On : ring port set to port-5 and port-6, Off : ring port set to port-1 and port-2)   |

| LED Indicators                      |  |
|-------------------------------------|--|
| Power Indicator                     | Green LED x 2  |
| 10/100Base-T(X) RJ45 Port Indicator | Green for port Link/Act. Amber for Link  |
| 100Base-FX SFP Port Indicator       | Green for port Link/Act  |
| R.M. Indicator                      | Green : Indicates that the system is operating in O-Ring Master mode   |
| O-Ring Indicator                    | Green : Indicates port operated in O-Ring mode   |
| Fault Indicator                     | Amber : Indicates unexpected event occurred  |
| Fault Contact                       |  |
| Relay                               | Relay output to carry capacity of 1A at 24VDC  |
| Power                               |  |
| Input Power                         | Dual 12~48 VDC power input at 6-pin terminal block   |
| Power Consumption (Typ.)            | 7 Watts  |
| Overload Current Protection         | Present  |
| Reverse Polarity Protection         | Present  |
| Physical Characteristics            |  |
| Enclosure                           | IP-30  |
| Dimensions (W x D x H)              | 26.1 mm (W) x 95 mm(D) x 144.3 mm(H)   |
| Weight (g)                          | 395 g  |
| Environmental                       |  |
| Storage Temperature                 | -40 to 85°C (-40 to 185°F)   |
| Operating Temperature               | -40 to 70°C (-40 to 158°F)   |
| Operating Humidity                  | 5% to 95% Non-condensing   |
| Regulatory Approvals                |  |
| EMI                                 | FCC Part 15, CISPR (EN55022) class A   |
| EMS                                 | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 |
| Shock                               | IEC60068-2-27  |
| Free Fall                           | IEC60068-2-32  |
| Vibration                           | IEC60068-2-6   |
| Safety                              | EN60950-1  |
| Warranty                            | 5 years  |

## Ordering Information

IES-2 **AA** **B** **CA**

| Code Definition | 10/100Base-T(X) Port Number | Additional Port Number | Additional Port Type             |
|-----------------|-----------------------------|------------------------|----------------------------------|
| <b>Option</b>   | - <b>04</b> : 4 ports       | - <b>2</b> : 2 port    | - <b>P</b> : 100Base-FX SFP port |

| Available Model | Model Name | Description  |
|-----------------|------------|--|
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### Packing List

- IES-2042PA
- DIN-Rail Kit
- Wall-mount Kit
- ORing Tool CD
- Quick Installation Guide

### Optional Accessories (Can be purchased separately)

- Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP devices
- SFP100 series, 100Mbps SFP optical transceiver
- DR-45 series, 45W DIN-Rail power supply
- DR-75 series, 75W DIN-Rail power supply
- DR-120 series, 120W DIN-Rail power supply